

ABSTRACT

An improved double block and double bleed stream switching system (modifiable to, for example, a double block, single bleed stream switching system) includes a common stream path for a multitude of gas streams from, for example, a process pipeline. The improved stream switching system includes a heating mechanism and insulation oven to help temperature stabilization, along with a structure to separate temperature sensitive solenoids from the heated area. Pre-heat coils are located between the sample switching system and the sample shut off system to warm the gas sample and to act as a flow restrictor. A first embodiment is suited for the Division 1 environment and a second embodiment is suited for Division 2 uses. The improved stream switching system may also feature membrane or cartridge filters located upstream of the sample wetted portion of the stream switching system.